**DOCKET NO: UPAP0011-100** 

**PATENT** Serial No.: 09/622,452 Filed: October 31, 2000

## IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Please amend claims 1 and 12.

Please withdrawn claims 20-22.

Upon entry of this amendment, claims 1-4, 6, 7, 9-15, 17, 18, and 33-36 will be pending.

## STATUS OF CLAIMS

## In the Claims:

- 1. (currently amended) A pyrogen-free composition comprising a plasmid comprising a nucleotide sequence that encodes an immunogen operably linked to regulatory elements and a nucleotide sequence that encodes an immunomodulating protein operably linked to regulatory elements, wherein said immunomodulating protein is selected from the group consisting of: MCP-1, MIP-1α, MIP-1β, IL-8, and RANTES, L-selectin, P-selectin, E-selectin, CD34, GlyCAM-1, MadCAM-1, LFA-1, VLA-1, Mac-1, p150.95, PECAM, ICAM-1, ICAM-2, ICAM-3, CD2, LFA3, mutant forms of IL-18, CD40, CD40L, vascular growth factor, IL-7, nerve growth factor, vascular endothelial growth factor, Fas, TNF receptor, Flt, Apo-1, p55, WSL-1, DR3, TRAMP, Apo-3, AIR, LARD, NGRF, DR4, DR5, KILLER, TRAIL-R2, TRICK2, DR6, and Caspase ICE.
- The plasmid of claim 1 wherein said immunogen is a target protein that 2. (original) encodes a pathogen antigen, a cancer-associated antigen or an antigen linked to cells associated with autoimmune diseases.
- The plasmid of claim 1 wherein said immunogen is a pathogen antigen. 3. (original)
- The plasmid of claim 1 wherein said immunogen is an HIV-1 antigen. 4. (original)
- 5. (canceled)

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6. (original) An injectable pharmaceutical composition comprising the plasmid of claim 1.

- 7. **(original)** A method of inducing an immune response in an individual against an immunogen comprising administering to said individual a plasmid of claim 1.
- 8. (canceled)
- 9. **(previously presented)** The plasmid of claim 1 wherein said immunogen is herpes simplex antigen HSV2gD.
- 10. (previously presented) An injectable pharmaceutical composition comprising the plasmid of 7claim 9.
- 11. **(previously presented)** A method of immunizing an individual against a herpes simplex virus infection comprising administering to said individual a plasmid of claim 9.
- 12. (currently amended) A <u>pyrogen-free</u> composition comprising two plasmids: a first plasmid comprising a nucleotide sequence that encodes an immunogen operably linked to regulatory elements; and

a second plasmid comprising a nucleotide sequence that encodes an immunomodulating protein operably linked to regulatory elements, wherein said immunomodulating protein is selected from the group consisting of : MCP-1, MIP-lα, MIP-1p, IL-8, RANTES, L-selectin, P-selectin, E-selectin, CD34, GlyCAM-1, MadCAM-1, LFA-1, VLA-1, Mac-1, pl50.95, PECAM, ICAM-1, ICAM-2, ICAM-3, CD2, LFA-3, M-CSF, G-CSF, IL-4, mutant forms of IL-18, CD40, CD40L, vascular growth factor, IL-7, nerve growth factor, vascular endothelial growth factor, Fas, TNF receptor, Flt, Apo-1, p55, WSL-1, DR3, TRAMP, Apo-3, AIR, LARD, NGRF, DR4, DR5, KILLER, TRAIL-R2, TRICK2, DR6, and Caspase ICE.

13. **(original)** The composition of claim 12 wherein said immunogen is a target protein that encodes a pathogen antigen, a cancer-associated antigen or an antigen linked to cells associated with autoimmune diseases.

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14. **(original)** The composition of claim 12 wherein said immunogen is a pathogen antigen.

- 15. **(original)** The composition of claim 12 wherein said immunogen is an HIV-1 antigen.
- 16. (canceled)
- 17. (original) An injectable pharmaceutical composition comprising the composition of claim 12.
- 18. (original) A method of inducing an immune response in an individual against an immunogen comprising administering to said individual a composition of claim 12.
- 19. (canceled)
- 20. (withdrawn) The composition of claim 19 wherein said immunogen is herpes simplex antigen HSV2gD.
- 21. (withdrawn) An injectable pharmaceutical composition comprising the composition of claim 20.
- 22. (withdrawn) A method of immunizing an individual against a herpes simplex virus infection comprising administering to said individual a plasmid of claim 20.

## 23-32 (canceled)

33. (previously presented) A method of inducing an immune response in an individual against an immunogen comprising administering to said individual:

a nucleic acid molecule comprising a nucleotide sequence that encodes said immunogen operable linked to regulatory elements; and

a nucleic acid molecule comprising a nucleotide sequence that encodes said immunomodulating protein operably linked to regulatory elements, wherein said immunomodulating protein is selected from the group consisting of : MCP-1, MIP-1α, MIP-1β, IL-8, RANTES, L-selectin, P-selectin, E-selectin, CD34, GlyCAM-1, MadCAM-1, LFA-1, VLA-1, Mac-1, p150.95, PECAM, ICAM-1, ICAM-2, ICAM-3,

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CD2, LFA-3, M-CSF, G-CSF, IL-4, mutant forms of IL-18, CD40, CD40L, vascular growth factor, IL-7, nerve growth factor, vascular endothelial growth factor, Fas, TNF receptor, Flt, Apo-1, p55, WSL-1, DR3, TRAMP, Apo-3, AIR, LARD, NGRF, DR4, DR5, KILLER, TRAIL-R2, TRICK2, DR6, and Caspase ICE.

- 34. **(original)** The method of claim 33 wherein said immunogen is a target protein that encodes a pathogen antigen, a cancer-associated antigen or an antigen linked to cells associated with autoimmune diseases.
- 35. **(original)** The method of claim 33 wherein said immunogen is a pathogen antigen.
- 36. (original) The method of claim 33 wherein said immunogen is an HIV-1 antigen.

37-39 (canceled)